Certificate of Approval

Awarded to

SODERN

LIMEIL BREVANNES
FRANCE

Bureau Veritas Quality International
certify that the Quality Management system of the above supplier has been assessed and found to be in accordance with the requirements of the quality standards detailed below :

ISO 9001 : 1994
ANSI / ISO / ASQC Q 9001 : 1994

SCOPE OF SUPPLY

DESIGN, DEVELOPMENT, MANUFACTURING OF SYSTEMS AND EQUIPMENT IN THE AREAS OF NEUTRONICS AND NEUTRONICS APPLICATIONS SPACEBORNE OPTRONICS AND INDUSTRIAL OPTICS.

CONCEPTION, DEVELOPPEMENT, REALISATION DE SYSTEMES ET D'EQUIPEMENTS DANS LES DOMAINES DE LA NEUTRONIQUE ET DE SES APPLICATIONS, DE L'OPTRONIQUE SPATIALE ET DE L'OPTIQUE PROFESSIONNELLE.

Original approval date : ***8 October, 1998***

Subject to the continued satisfactory operation of the supplier's Quality Management System, this certificate is valid for a period of three years from :

8 October, 1998

Issue date ***19 November, 1998***

Bureau Veritas Quality International

ANSI-RAB QMS ACCREDITED

Certificate N° ***51130***

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Subject : Quality ISO 9001 for CNA

Dear Mr Beltrop

Here are some informations about CNA Quality Aspects.

The CNA is manufactured by SODERN following all Quality Rules discribed in our Quality Assurance Manual.

The CNA was one of the projects which have been analysed during the ISO 9001 Quality Audit.

No non-conformity has been find during this Audit.

Find enclosed some pages of our Quality Manual which precise the more important points (management, quality control, configuration management, control manufacturing of anomalies), and an ISO 9001 agreement.

Best Regards.

p.i. AS

P. LEBRUN
Project Manager

Visa/Approval :

LEW 5970 00056

4. QUALITY MANAGEMENT

To reach its objectives in terms of quality, SODERN, as early as 1970, set up a quality assurance department in compliance with the requirements of high technology sectors (defence, space, etc.).

In 1982 the company obtained RAQ1 certification which has been renewed every year.

Upon its renewal in June 1997, the DGA granted SODERN AQAP110 certification.

4.1. QUALITY POLICY

The quality policy is defined by the General Management (cf. DA1).

The policy is aimed at ensuring customer satisfaction which is naturally in the best interests of the company and its staff.

Guiding principles:

- **to reply to the specific requirements of each of our customers,**
- **to ensure the lasting future of SODERN** by considering quality as one of the deciding factors,
- **to define and maintain a system** guaranteeing the capacity of the company to manage quality (outside recognition: AQAP 110 and ISO 9001 certification; internal monitoring and control: auditing, management reviews (cf. DA2)),
- **to promote a continuous quality improvement process**, which is applied to products and processes, favouring the prevention of non-conformities and *involves each member of the company in the understanding and application of these regulations:*
  - *training for their comprehension and use,*
  - *participation in their development and optimisation,*
  - *detection of problems,*
  - *proposal of preventative and corrective action,*
  - *promoting awareness of a corporate culture,*
  - *promoting a public image.*

5.5. PRODUCT QUALITY CONTROL

Product quality control is assured by organisation (cf. §3.2), management regulations and project phasing (cf. DR1).

5.1. PROJECT MANAGEMENT

5.1.1. Organisation

A **Project Manager** is designated for each project, from the reply to a call-for-tender (cf. DA3) until the end of the contract execution:

- he reports to the *Business Activity Manager concerned* by the product,
- he manages a *project team* named by the General Management *(project organisation chart)* which is composed of:
  - *a Technical Manager* for control of the technical activity,
  - *a Quality Engineer* for control of product assurance,
  - *a Contract-Bid Manager for control of contractual aspects*,
  - *one or several service managers* named by the Departmental Managers they report to for the control of technical design or production tasks in the professional fields required for execution of the contract.

5.1.2. Management tools

From the reply to a call-for-tender to the completion of a contract, these tools ensure management control of the project.

- **The Contract:** this defines SODERN's technical and sales commitments as well as **supplies and deadlines** according to the needs and requirements of the customer.
  It is the successful end to the reply to a call-for-tender in the terms of the **Contract Review** (cf. DA3), and contains, where necessary, **the safety appendices** which define the regulations of classification which apply to the project.

C. Manufacturing and control, after-sales service

Process control activities range from production planning to delivery after acceptance and are managed in compliance with DA11. **Associated services** activities such as installation, training, after-sales support (principally recycling, repairs) are defined in DA 11.

Whilst remaining under the supervision of the Project Manager or a Technical Manufacturing Manager, these activities are piloted by a process specialist who, on the basis of a *manufacturing file* in its *user configuration, initiates*:

- **purchasing** in compliance with DA 6 from sub-contractors certified in compliance with DA7,
- *the control of purchased products* in compliance with DA12
- management of products supplied by the customer in compliance with DA8.
- Production tasks in compliance with procedures defined in the manufacturing file, in particular *shop travellers.* These travellers accompany the equipment during its development and enables the **identification and traceability required** in compliance with DA9 and DA10,

  During the Production process and upon final acceptance, the product is **controlled, tested and the results recorded** in compliance with DA12.

  The control, measurement and testing resources remain operational in compliance with DA13,
- according to the customer's activities and requirements, *a technical assessment* is issued to validate the end of the production phase and authorise acceptance tests.
- An end of acceptance meeting (C.R.E.: *Test Review Commission*) is held to examine the results of the tests and decide on the conformity of the product in its *"as built" configuration* and to approve delivery.

Notes :

1. the nature and frequency of *Controls* at SODERN, which are the responsibility of the Quality Department, are defined according to production tasks:

   - *auto-controls*, are ensured by each person in the company for their area of activity,
   - *section controls*, are a local and hierarchical confirmation of auto-controls,
   - *quality controls*, are ensured by a Quality Department representative (often associated with specific production phase inspections, in particular pre-assembly, packaging, etc.),
   - *Customer controls*, are quality controls carried out in the presence of the customer or his representative.

2. During these production, control and test stages **handling, packaging, conservation and storage** are carried out in compliance with DA 17 and **delivery in compliance with DA18.**

C. **Configuration management**, concerns the physical and functional description of the products (file) and any copies produced or under development. This is carried out in compliance with DA 22 and DA 15.

This management enables:

– **each participant in a project** (the company, the customer and each sub-contractor) **to use**, with respect to validated and published configurations, **the same documents and data**,

– **authorised changes** to be complete and coherent.

Management is organised by:

– **a configuration management plan** (which may or may not be included in the Quality assurance Plan). It takes account of customer requirements and defines:

  . the rules of management (particularly those for modifications according to phase),

  . the level of visibility,

  . traceability,

  . identification of the configurations to be finalised (for reviews, modification committees or project progress meetings, configuration validation audits, etc.).

D. **Control of anomalies and non-conformities** is regulated in compliance with DA 14.

All defects are subject to a *detailed report* written by company personnel while carrying out their function and according to their responsibility. This is referred to as **anomaly processing**. It takes into account defects relating to:

- product design, development and production activities,
- quality system operation,
- process development,
- claims and customer feedback,
- sub-contractor activities.

It is:

- **recorded** on **a centralised data base**,
- **circulated** to the relevant persons,
- **analysed** (source, consequences and according to the case in question, participation of the customer and/or the sub-contractor concerned),
- **closed** after the definition and scheduled implementation and completes **corrective and/or preventative action** (requests for waivers and modification in compliance with DA 15).

Preventative actions are managed in compliance with DA 16.

Note: *Anomaly* : any recorded defect
Non conformity : recorded default which reveals a discrepancy with respect to modifications.